



San Francisco
Bay Regional
Water Quality
Control Board

2101 Webster St. #500
Oakland, CA
94612
(510) 286-1255
FAX (510) 286-1380

R-2A



Pete Wilson
Governor

Date: JUL 15 1998
File No. 2199.9023 (VBP)

CERTIFIED MAIL NO.
RETURN RECEIPT REQUESTED

Mr. Charles W. Weir, General Manager
East Bay Dischargers Authority
2651 Grant Avenue
San Lorenzo, CA 94580-1841

RE: ADMINISTRATIVE CIVIL LIABILITY-COMPLAINT NO. 98-003

Dear Mr. Weir:

Enclosed is Complaint No. 98-003. The Complaint alleges that there was a discharge of chlorinated wastewater from your outfall into San Francisco Bay. From November 1, 1997, to November 3, 1997, there was a discharge of approximately 140 million gallons of wastewater containing chlorine residual. The discharge was a result of equipment malfunction in the sulfonator.

You promptly reported the discharge, and you implemented remedial measures. Nonetheless, these were violations of the Order No. 94-072 and accordingly, we are imposing an Administrative Civil Liability of \$43,000. The Complaint No. 98-003 explains the basis of this liability, as well as your payment options. The allegations and the proposed liability are discussed more fully in the attached staff report.

I plan to bring this matter to the Regional Board at its August 19, 1998, meeting. You have three options:

1. You can appear before the Board at that meeting to contest the matter. Written comments are due by July 22, 1998. At the meeting, the Board may impose administrative civil liability or refer the case to the Attorney General to have a Superior Court consider imposition of a liability.
2. You can waive the right to a hearing by signing the last page of the Complaint in the appropriate location. By doing so, you agree to pay the liability.
3. If you would like to develop an environmental enhancement project in lieu of payment of part of the liability, do not sign the waiver. Instead, state your intent in a letter addressed to me by August 10, 1998. The staff will assist you in identifying and developing such project. If more time is required to develop a project, the matter can readily be continued to the September 16, 1998, Board meeting.



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Our mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

Please contact the Board's Legal Counsel Elizabeth Miller Jennings at (916) 653-0428 or me at (510) 286-0516 if you have any questions.

Sincerely,



Loretta K. Barsamian
Executive Officer

Enclosure: Citation No. 98-003
Staff Report w/attachments

cc: John Norton, SWRCB



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STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

IN THE MATTER OF

EAST BAY DISCHARGERS AUTHORITY
MARINA DECHLORINATION FACILITY
SAN LORENZO, ALAMEDA COUNTY

) COMPLAINT NO. 98-003
) FOR
) ADMINISTRATIVE
) CIVIL LIABILITY
)

YOU ARE HEREBY GIVEN NOTICE THAT:

1. You are alleged to have violated provisions of law, or orders of the Regional Water Quality Control Board, San Francisco Bay Region (the Regional Board), for which the Regional Board may impose civil liability under section 13385 of the State Water Code.
2. Unless waived, a hearing on this matter will be held before the Regional Board on August 19, 1998, Second floor, BART Headquarters Building, located at 800 Madison Street in Oakland, California. You, or your representative(s), will have the opportunity to be heard and to contest the allegations in this Complaint and the imposition of civil liability by the Regional Board. An agenda showing the time set for the hearing will be mailed to you not less than 10 days before the hearing date. You must submit copies of any written evidence concerning this complaint to the Board by August 7, 1998. Any written evidence not so submitted may not be considered by the Board.
3. At the hearing, the Regional Board will consider whether to affirm, reject or modify the proposed administrative civil liability, or whether to refer the matter to the Attorney General for recovery of judicial civil liability.

ALLEGATIONS

4. You are alleged to have violated waste discharge requirements contained in Order No. 94-072 (NPDES permit No. CA0037869).
5. The following facts are the basis for the alleged violations in this matter:
 - a. The East Bay Dischargers Authority (discharger) owns and operates a wastewater dechlorination plant at San Leandro Marina. The plant dechlorinates treated wastewater from the EBDA member agencies. After treatment the wastewater is discharged through a deepwater outfall to Central San Francisco Bay.
 - b. The discharge is presently governed by Board Order No. 94-072 (NPDES permit No. CA0037869).
 - c. Section B.1.d. of the NPDES permit (Order No. 94-072) states that the total chlorine residual in the discharge shall not exceed a concentration of 0.0 mg/l (instantaneous maximum).

- d. The discharger reported following significant chlorine residual violation in November 1997. The violations were caused by equipment malfunctions and absence of operation staff at the dechlorination facility.

<u>Date</u>	<u>Maximum Chlorine Residual (mg/l)</u>	<u>Duration (hrs)</u>	<u>Volume (million gallons, MG)</u>
11/01/97 2.5		20.5	53.81 MG
11/02/97 1.0		24	67.0 MG
11/03/97 1.0		7.0	19.0 MG
Total		51.5	139.81 MG

- e. The dechlorination process employed at Marina Dechlorination Facility utilizes sodium bisulfite to reduce the free chlorine in the discharge. On November 1, 1997, a power supply board in the primary controller failed. The failure rendered all control equipment including the backup controller inoperative. This resulted in a discharge of approximately 140 million gallons (MG) of wastewater containing chlorine residual of up to 2.0 mg/l. No alarm was sent out to the operation staff because the failure in the power supply board rendered the normal alarm system inoperative. The facility is not staffed during weekends, and therefore no staff was present at the facility to observe the operation of the equipment. On Monday morning, November 3, 1997, the control equipment was put in manual operation to initiate dechlorination. The power supply board was replaced by noon on November 3, 1997.
- f. This chlorine residual violations was significant in that it exceeded performance thresholds established by the Basin Plan. Chlorine is quite toxic to many aquatic species, and salmon are particularly sensitive. The discharge of wastewater containing chlorine residual into Central San Francisco Bay potentially caused acute toxicity in and beyond the zone of initial dilution.

PROPOSED CIVIL LIABILITY

6. The maximum civil liability which could be imposed by the Regional Board in this matter, under Section 13385 of the Water Code, is \$10,000 per day and \$10 per gallon for the discharged volume that is not cleaned up in excess of 1,000 gallons. If this matter is referred to the Attorney General, higher liability of up to \$25,000 per day and up to \$25 per gallon may be imposed.

The maximum level of liability is unwarranted, given the minimal impact to the Waters of the State, and the corrective actions taken by the discharger. Still, the discharger remains liable as the discharge violations were preventable; we are imposing an administrative civil liability in the amount of \$43,000. This amount (\$43,000) includes \$3,000 for the reimbursement of staff costs incurred by Regional Board staff in preparing the Complaint and supporting information.

WAIVER OF HEARING

7. You may waive the right to a hearing. If you wish to waive the hearing, an authorized person must check and sign the waiver and return it to the Regional Water Quality Control Board, San Francisco Bay Region, at 2101 Webster Street, Suite 500, Oakland, CA 94612, by August 7, 1998. Payment of the civil liability is due within 30 days after an Order assessing civil liability is adopted by the Board.

Should you have any questions, please contact the Executive Officer at (510) 286-0516, or Elizabeth Miller Jennings, Esq., the Regional Board Counsel at (916) 657-2421.

6.30.98

DATE

Loretta K. Barsamian

LORETTA K. BARSAMIAN
EXECUTIVE OFFICER

WAIVER

- ☐ By checking this box, I agree to waive my right to a hearing before the Regional Board with regard to the violations alleged in Complaint No. 98-003, and to remit payment for the civil liability imposed. I understand that I am giving up my right to be heard, and to argue against the allegations made by the Executive Officer in this Complaint, and against the imposition of or the amount of, civil liability proposed. I further agree to remit payment for the civil liability imposed within 60 days after the Order assessing civil liability is adopted by the Board.

DATE

DISCHARGER

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION


TO: Loretta K. Barsamian
Executive Officer

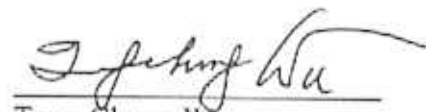
FROM: Vijay B. Patel
Staff Engineer

DATE: March 11, 1998

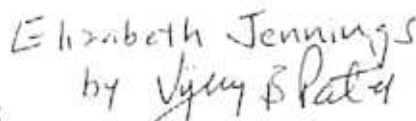
SUBJECT: Discharge of chlorinated wastewater, East Bay Dischargers Authority (EBDA), Marina Dechlorination Facility, Alameda County - Consideration of Administrative Civil Liability for Discharging a Large Volume of Chlorinated Wastewater into San Francisco Bay

Concur:


Greg Walker
Section Leader


Teng-Chung Wu
Division Chief

Concur as to legal form
and sufficiency of document:


Elizabeth M. Jennings, esq.
Legal Counsel

East Bay Dischargers Authority (EBDA) owns, operates and maintains a wastewater dechlorination facility at the San Leandro Marina which provides dechlorination to an average dry weather combined flow of approximately 61 million gallons (MG) per day of treated wastewater. The combined flow consists of chlorinated effluent from five EBDA member agencies and the Livermore Amador Valley Water Management Agency (LAVWMA).

The five EBDA member agencies include City of Hayward, City of San Leandro, Oro Loma Sanitary District, Castro Valley Sanitary District, and Union Sanitary District. LAVWMA is comprised of Dublin San Ramon Services District and the City of Livermore. By contractual agreement, EBDA transports LAVWMA treated wastewater jointly with the treated wastewater from its member agencies to its dechlorination station near the San Leandro Marina (Marina Dechlorination Facility) and thence to its deep water outfall in Lower San Francisco Bay west of the Oakland Airport.

On November 3, 1997, EBDA reported discharge of approximately 140 MG of chlorinated wastewater from its outfall into San Francisco Bay. This report discusses this discharge, and finds that EBDA was responsible for allowing this unauthorized discharge, which is contrary to the Water Code. I recommend the imposition of administrative civil liability in the amount of \$43,000, of which \$3,000 is for recovery of staff costs.

DISCUSSION:

At 3:30 a.m. on Saturday, November 1, 1997, a release of secondary treated chlorinated effluent into San Francisco Bay occurred. The flow lasted for a total of 51.5 hours, with a volume of approximately 140 MG. Due to power surge the power supply board failed in the sodium bisulfite dosage rate primary controller. During a primary system failure, it was designed that alarm signals would be sent the automatic dialer to notify operations personnel and secondary controller would take over. However, no alarm signals were sent out because the power supply board failure rendered the normal alarm system inoperative. The effluent water had chlorine residuals up to 2 mg/l. The facility is not staffed during weekends, and therefore no staff was present at the facility to observe the operations of the equipment. On Monday morning, November 3, 1997, the control equipment was put in manual operation to initiate dechlorination. The power supply board was replaced by noon. The primary controller has been reprogrammed to enable an alarm in the event similar situation occurs again. Also, the secondary controller is now programmed to operate with a sodium bisulfite dosage rate 25% higher than normal feed rate. In addition, an uninterruptable power supply unit has been installed to provide continuous power supply to the controllers.

LEGAL BASIS FOR ACTION:

EBDA has violated Section 13385 of the California Water Code. Specifically, EBDA has violated Effluent Limitation B.1.d. of Order 94-072 (NPDES Permit CA0037869) adopted by the Regional Board pursuant to Water Code Section 13263 by discharging wastewater containing chlorine residual above 0.0 mg/l level. I believe that this unauthorized discharge warrants the imposition of administrative civil liability. Section 13385(e) of the Water Code requires a discussion of the following factors that have bearing on the amount of liability:

1. NATURE AND CIRCUMSTANCES OF THE VIOLATIONS

EBDA determined power surge in PG&E supply as the cause of the power supply board failure in the primary controller. The failure rendered all control equipment including the backup controller inoperative. The failure of power supply could have been prevented by installing uninterruptable power supply unit. The primary controller could have been powered and programmed to enable an alarm if there is any equipment malfunction. Also, the controllers could have been programmed so as to provide adequate dechlorination when the power supply was interrupted.

2. EXTENT AND GRAVITY OF THE VIOLATIONS

No fish kills were reported in the affected waters; however, the operations personnel were not present to observe the affected waters. Board staff believes the large volume of the discharge as well as the long duration of the discharge are serious violations of the permit. The acute toxicity of even small amounts of free chlorine to many aquatic organisms is well established. One source (McKee & Wolf, 1963) states that chlorine residuals under 1 ppm

were lethal to various trout species, generally within few hours. It is likely that during the time of discharge, aquatic organisms in the receiving waters were adversely affected.

3. THE DEGREE OF CULPABILITY OF THE VIOLATOR

EBDA is responsible for ensuring proper operation and maintenance of the facility, and is responsible for meeting the purpose and intent of NPDES permit requirements for the discharge. The whole incident lasted for about 51 hours and nobody was present at the facility to notice this incident. The controllers were not equipped with any backup power supply. Also, they were not programmed properly to enable the alarm in the event of equipment malfunction. The incident could have been prevented by programming the controllers so as to deliver sufficient amount of sodium bisulfite when the power supply was interrupted.

4. ECONOMIC SAVINGS RESULTING FROM THE VIOLATIONS

The economic savings, incurred as a result of this violation, is primarily the avoidance of sodium bisulfite use and the fact that an uninterruptable power supply was not initially provided for the supply system.

5. ABILITY TO PAY

As a Joint Powers Public Agency, EBDA should be able to pay a modest liability with no impact on their ability to conduct their business.

6. PRIOR HISTORY

A notice of violation was issued to EBDA in 1990 for chlorine residual violations. In June 1991, the Regional Board imposed a \$11,400 liability against EBDA, for three violations totaling 8 MG. The 0.0 mg/l chlorine residual effluent limit was exceeded 27 times in 1997; however, most of these violations lasted for less than 5 minutes.

7. OTHER MATTERS THAT JUSTICE MAY REQUIRE

Staff time to investigate the incidence and to prepare the Complaint and staff report totaled 30 hours, at an average cost to the State of \$100 per hour. Thus the total comes out to \$3,000.

RECOMMENDATION

I recommend the Regional Board pursue an enforcement action under Section 13385 of the California Water Code, as EBDA has violated permit requirements for the Marina Dechlorination Facility. The maximum penalty that could be imposed under Section 13385(c)(1) & (2) is \$10,000 per violation day, plus \$10 per gallon for the discharge volume that is not cleaned up,

and that exceeds 1,000 gallons. If this matter is referred to the Attorney General, a liability of \$25,000 per violation day, plus \$25 per gallon can be imposed.

The maximum penalty that could be assessed under Section 13385(c) is as follows:

3 days @ \$10,00/day	=	\$30,000
140,000,000 @ \$10/gallon	=	\$1,400,000,000
TOTAL	=	\$1,400,030,000

I recommend that administrative civil liability be imposed in the amount of \$43,000, which includes the staff costs of \$3,000. The recommended penalty is significantly reduced from the maximum allowable for several reasons. EBDA has been forthcoming, responsive, and cooperative in the Board Staff's efforts to investigate the incident. Also, EBDA has made a number of improvements at the treatment facility to abate future discharges

I also recommend that this penalty should be imposed administratively rather than by referral to the attorney general because:

1. The penalty is sufficient to cover staff time expended on investigations, case follow-up, and provides for limited compensation for unquantified damage to waters of the State.
2. Additional expenditure of staff time to seek greater penalties, such as through referral to the Attorney General, would provide no real benefit to the environment.
3. The means for imposition of reasonable penalties are provided for within the administrative liability provisions of the Water Code.

ATTACHMENTS:

Location Map

EBDA Letter dated November 12, 1997.